

1 KEKER & VAN NEST LLP
2 ROBERT A. VAN NEST - # 84065
3 rvannest@kvn.com
4 CHRISTA M. ANDERSON - # 184325
5 canderson@kvn.com
6 DANIEL PURCELL - # 191424
7 dpurcell@kvn.com
8 633 Battery Street
9 San Francisco, CA 94111-1809
10 Telephone: (415) 391-5400
Facsimile: (415) 397-7188

7 KING & SPALDING LLP
8 BRUCE W. BABER (pro hac vice)
9 bbaber@kslaw.com
10 1185 Avenue of the Americas
New York, NY 10036
Telephone: (212) 556-2100
Facsimile: (212) 556-2222

11 Attorneys for Defendant
12 GOOGLE INC.

13 UNITED STATES DISTRICT COURT
14 NORTHERN DISTRICT OF CALIFORNIA
15 SAN FRANCISCO DIVISION

16 ORACLE AMERICA, INC.,

Case No. 3:10-cv-03561 WHA (DMR)

17 Plaintiffs,

CORRECTED EXHIBIT F TO
DECLARATION OF EDWARD A. BAYLEY
IN SUPPORT OF GOOGLE INC.'S
MOTIONS IN LIMINE NOS. 1-6.
PART 4 OF 5

18 v.

19 GOOGLE INC.,

20 Defendant.

21 Hearing: April 27, 2016
Dept. Courtroom 8, 19th Fl.
22 Judge: Hon. William Alsup

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CORRECTED EXHIBIT F TO DECLARATION OF EDWARD A. BAYLEY IN SUPPORT OF GOOGLE
INC.'S MOTIONS IN LIMINE NOS. 1-6. PART 3 OF 5
Case No. 3:10-cv-03561 WHA (DMR)



INTELLECTUAL CAPITAL EQUITY

A. [E]ssentially the message repeated frequently was that the more people use the internet, the more they do searches, and the more they do searches, the more likely they are to use Google to do so and therefore create revenue for Google through advertising.

Q. Okay. So Google expected to profit from Android by increasing the number of people who were doing searches on Google's search engine?

A. That is the stated – that's what we were told.

Q. Okay. And that increase in revenue would come from search advertising revenues. Is that what you were told?

A. That's what we were told.⁵⁹⁹

...

Q. Did you expect there would be any indirect benefits to Google from developing and Distributing the Android Platform?

A. To the extent that the users of that platform would also adopt Google search and advertising, yes, there would be monetary benefit to Google, if its advertising products are being used.

Q. Did you believe that users of the Android platform would adopt Google search and advertising?

A. Because of the goodwill being generated by having an open, free platform, as I said before, the carriers and OEMs, it would generate goodwill towards Google, and they would be more disposed to using Google's platform for search and advertising, yes.⁶⁰⁰

...

Q. Would it be accurate to say that the model Google has for Android is to make it available for free and to make money from advertising and the value-add services that go on top of the Android platform?

A. That's a component of our strategy, yes, and – yes.⁶⁰¹

...

Q. With that modification, is that how – one of the ways in which Android generates revenue?

A. ". . . we generate revenue from ads shown on Google Search on Android devices. . . . we make money off of ads on Google Search on an Android device. We make [money] off of ads revenues on Google Search on Android devices and from a very small share of money that we get from paid applications on Android Market."⁶⁰²

⁵⁹⁹ Deposition of Daniel Morrill, July 12, 2011, p.73.

⁶⁰⁰ Deposition of Dipchand Nishar, September 8, 2011, p. 96.

⁶⁰¹ Deposition of Eric Schmidt, August 23, 2011, p. 11.

⁶⁰² Deposition of Aditya Agarwal, April 8, 2011, pp. 24 – 27.



Public Statements and Disclosures by Google Executives

278. The following public statements by Google Executives also illustrate that Google's principal business objective with respect to Android has been the generation of mobile Ad Revenue.

- **Google Inc. Q2 2010 Earnings Call Transcript:** "*[W]e gave some data just on the scope of the numbers, the 160,000 Android devices as well as the growth in apps from 30,000 to 70,000, but I think the most important most obvious thing to think about from our perspective is what's the most popular app on these devices. The most popular app is a browser. And what do people do with the browser on these devices? They search an order of magnitude more than they have on any previous type of smartphones, which they had in years past. So, the combination of people browsing on these smartphones connected on very, very fast networks, and searching on them is basically the formula around how Google makes, how Google succeeds.*"⁶⁰³
- **Google Inc. Q2 2011 Earnings Call Transcript:** "*Continuing to talk about revenues, our mobile business continues to be another area of robust growth. The number which Larry just shared of 550,000 Android, that and the success of smartphones and general mobile data devices around the world is acting as an accelerator to our mobile advertising effort.*"⁶⁰⁴
- **Google Inc. October 13, 2011 Earnings Call Transcript:** "*Let's turn to mobile advertising. Larry mentioned \$2.5 billion as a run rate. Our revenue growth continues to accelerate even in mobile, driven primarily by mobile search. This growth, obviously, is driven both by the underlying expansion of Android devices and of tablets as well as stellar performance by our sales teams by working closely with our customers to help them craft compelling mobile advertising solutions. Many advertisers have greatly increased the size and frequency of the mobile campaigns. Mobile is becoming a must-have.*"⁶⁰⁵
- **Trial Testimony from the 2012 Proceedings:** During the 2012 trial in this matter, Mr. Schmidt stated that, with respect to Android, "*[t]he vast majority of Google's revenue at the time and today comes from search revenue. And so the primary reason to have something like Android is that people will do more searches, and then we'll get more money as a result. And that's how we, essentially, pay for the strategy of Android.*"⁶⁰⁶

Statements by Independent Third Party Research Firms

⁶⁰³ Google Inc. Q2 2010 Earnings Call Transcript, <http://seekingalpha.com/article/214786-google-inc-q2-2010-earnings-call-transcript>, pp. 7 - 8.

⁶⁰⁴ Google Inc. Q2 2011 Earnings Call Transcript, <http://www.morningstar.com/earnings/PrintTranscript.aspx?id=28170009>, p. 6.

⁶⁰⁵ Google Management Discusses Q3 2011 Results – Earnings Call Transcript, October 13, 2011, <http://www.morningstar.com/earnings/PrintTranscript.aspx?id=31456567>, p. 6.

⁶⁰⁶ *Oracle America, Inc. v. Google Inc.*, No. C. 10-3561, April 24, 2012, p. 1458.



279. Statements by independent third-party research firms likewise substantiate the connection between Android and Ad Revenue.

- According to a 2011 Piper Jaffray analyst report, Google was expected to generate advertising revenue of \$7.80 per Android user in 2011 and \$9.85 per user in 2012.⁶⁰⁷ *As consumer time spent on mobile devices continues to increase, we expect the ARPUs on mobile could eventually reach those of Google's online businesses.*⁶⁰⁸
- According to a Forbes article dated April 2015, *"[t]he mobile search ads division is the second largest division for Google and makes up approximately 32% of its total value, according to our model. Google, with 90% market share, dominates the mobile search engine market. One of the key reasons for this dominance is its flagship Android OS, which has witnessed excellent adoption and penetration in the smartphone space.*⁶⁰⁹

Statements by District Court and Court Appointed Expert

280. Perhaps in recognition of the evidence of the connection between the infringement of the Java Copyrights and Google's Android-related Ad Revenues, the District Court has stated that *"Google receives revenue through advertisement whenever a consumer uses particular functions on an Android smartphone."*⁶¹⁰ The District Court has also indicated that:

- *"The accused product is Android, but unlike a typical infringing product, Android is not sold [by Google]. Instead, Google profits from Android indirectly. Any valuation of Android must take this business model into account. Put differently, the question is 'what is the market value of Android. – what could it be bought or sold for – and to what extent do the infringing features contribute to that overall value?'*⁶¹¹
- *"Google is incorrect in asserting that the overall value of Android is irrelevant and is further incorrect in asserting that advertising revenues have nothing to do with the overall value. Of course they do have something to do with the overall value. There is evidence, for example, that users with Android phones 'search twice as much' as users with other types of phones, increasing the advertising revenue derived from Google's search service."*⁶¹²

⁶⁰⁷ Piper Jaffray Report, "Android likely a \$1 Billion Business Next Year for Google," February 8, 2011, p. 2.

⁶⁰⁸ Piper Jaffray Report, "Android likely a \$1 Billion Business Next Year for Google," February 8, 2011.

⁶⁰⁹ "Google Earnings Preview: Will Advertising Revenue Grow?", Forbes, April 22, 2015. <http://www.forbes.com/sites/greatspeculations/2015/04/22/google-earnings-preview-will-advertising-revenue-grow/>.

⁶¹⁰ *Oracle America, Inc. v. Google Inc.*, 872 F.Supp.2d 974, 978 (N.D.Cal. 2012).

⁶¹¹ Trial Testimony of Eric Schmidt, Transcript Vol. 07, April 24, 2012, p. 1456; Order Granting in Part Motion to Strike Damage Report of Plaintiff Expert Iain Cockburn, July 22, 2011, p. 9.

⁶¹² Deposition of Eric Schmidt, August 23, 2011, pp. 15-16; Order Granting in Part Motion to Strike Damage Report of Plaintiff Expert Iain Cockburn, July 22, 2011, p. 9.



- *"Additionally, for searches on Android devices, Google must share its revenue only with the device operator and not with any other intermediary. The relationship between Android and Google's advertising revenues would have been known to the parties at the time of the hypothetical negotiation. Plaintiff may base its damages model on then-expected advertising revenue so long as apportionment is done."⁶¹³*
- *"In January 2006, Google internally discussed a possible co-development partnership deal under which Java technology would become an open-source part of the Android platform. The deal was projected to cost Google 25-50 million dollars, plus a negotiable share of revenue from 'platform-enabled mobile ads.'⁶¹⁴ The record, however, contains no evidence that Google actually proposed this idea to Sun."⁶¹⁵*
- *"The following month, Sun supposedly 'proposed [to Google] a deal that would include both a payment of \$20 million per year for three years plus 10 percent of the revenue generated by Google on handsets running the open source platform, capped at \$25 million' per year."⁶¹⁵*

281. Given this and the other record evidence in this case, it is my opinion that Google realized Ad Revenue from the use of its services conducted from Android devices that is attributable to the Infringed Java Copyrights.

11.1.5 Google's Uses of Per Device Metrics to Measure its Monetization Strategy

282. The causal nexus between Android and the revenues identified above is supported by Google's own analysis of the per device metrics it uses to measure its monetization strategy. Google's documents explicitly indicate that the lifetime value of an Android user can be measured by the revenues derived from the Search Ad, Google Play (content and apps) and Brand Ads like YouTube and Display. In one such document, the lifetime margin impact of an Android user was determined to be [REDACTED].⁶¹⁶

11.1.6 Unclaimed Benefits Attributable to the Infringed Java Copyrights

283. It should also be noted that my calculation of Google's profits is conservative in that it does not reflect profits enjoyed by Google outside of its Android business that also stem from its improper use of the Infringed Java Copyrights. Such benefits include, but are not necessarily limited to, enhancements in Google's brand-value, in non-mobile search business. I note that Google recognized that Android's success was an opportunity to "overcome our

⁶¹³ Order Granting in Part Motion to Strike Damage Report of Plaintiff Expert Iain Cockburn, July 22, 2011, pp. 9-10; Deposition of Eric Schmidt, August 23, 2011, pp. 15-16.

⁶¹⁴ GOOGLE-14-00042244-254 at 248; Order Granting in Part Motion to Strike Damage Report of Plaintiff Expert Iain Cockburn, July 22, 2011, p. 3.

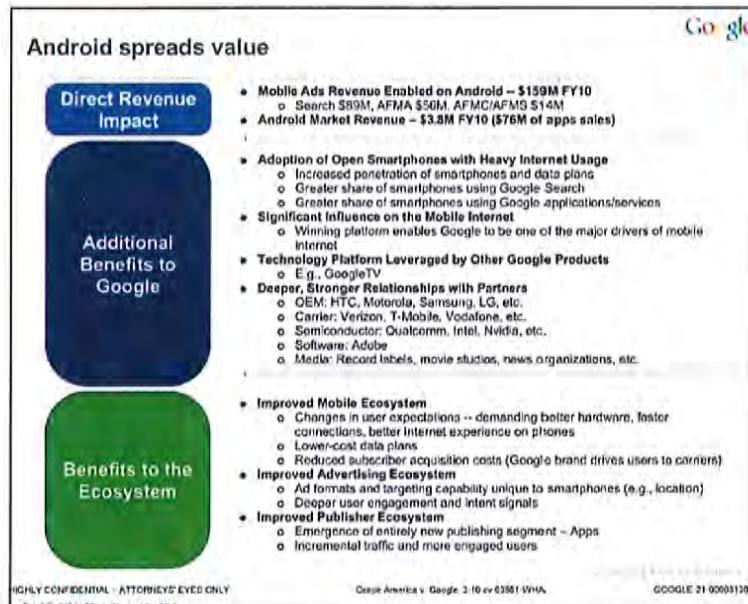
⁶¹⁵ OAGOOGLE-0000357494; Order Granting in Part Motion to Strike Damage Report of Plaintiff Expert Iain Cockburn, July 22, 2011, p. 3.

⁶¹⁶ GOOG-00130338 – 386 at 343.



shortcomings.⁶¹⁷ I also note that, as seen in the **Figure 42**, Google's own internal documents state that Android spreads value by providing "Additional Benefits to Google."

Figure 42
Google Internal Presentation⁶¹⁸



11.2 Quantification of Android-Related Revenues

284. In the following section, I address the quantification of the identified revenues Google realized from the Android platform. I would note that it could also be reasonable to claim additional sources of revenue and value to Google beyond those identified. For example, the value of Android to the overall Google brand has been significant.⁶¹⁹ A 2014 document entitled Google Android Retail and Play indicates that [REDACTED]

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285. Additionally, according to Mr. Schmidt, the Android platform has covered up for other Google shortcomings.⁶²¹ Therefore, I believe my opinion regarding Google's profits is conservative in

⁶¹⁷ GOOGLE-26-00031558 – 559 at 559.

⁶¹⁸ Trial Exhibit 1061 – GOOGLE-21-00008116-139 at 130.

⁶¹⁹ Google 'Opens' a New Front in the Mobile Platform Wars, *Frost & Sullivan Market Insight*, October 23, 2008.

⁶²⁰ GOOG-00100278 – 301 at 280.

⁶²¹ GOOGLE-26-00031558-559 at 559.



that it does not reflect any of those additional components of value, beyond those specifically related to the Android platform.⁶²²

11.2.1 Hardware

286. Google began selling Nexus devices in 2010. As reflected in **Figure 43**, from 2010 to 2015, annual revenue from sales of Nexus phones, tablets, watches and accessories⁶²³ [REDACTED]

Figure 43

Android Hardware Revenue⁶²⁴

(in millions)	2008	2009	2010	2011	2012	2013	2014	2015 [1]	Total
Hardware	\$0.0	\$0.0	\$115.2	\$0.0	\$303.5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[1] Q4 2015 is a Google forecast.

287. All amounts received from sales of Nexus devices are recorded as Hardware Revenue. All costs associated with these devices are recorded to Cost of Sales.

11.2.2 Android Applications

288. Google began selling Apps through Android Market/Google Play in 2009. As reflected in **Figure 44**, Google's 30 percent share⁶²⁵ of revenue from sales of paid for Apps downloaded from Android Market/Google Play increased from \$1.1 million in 2009 to an annualized total of [REDACTED] as of 2015. As **Figure 44** illustrates, Google achieved App sales of [REDACTED] from 2009 to 2015.

⁶²² GOOG-00275390 – 410, at 395

⁶²³ Deposition of Jonathan Gold, December 11, 2015, p. 70.

⁶²⁴ See Exhibit 8.

⁶²⁵ Google shares App Revenue with App developers. Deposition of Jonathan Gold, December 11, 2015, p. 73.



Figure 44

Android App Revenue⁶²⁶

<i>(in millions)</i>	2008	2009	2010	2011	2012	2013	2014	2015 [1]	Total
App Sales	\$0.0	\$1.1	\$8.0	\$36.2	\$136.1				

[1] Q4 2015 is a Google forecast.

289. According to Mr. Gold, Google's reported Android App Revenue reflects only its 30 percent share of the revenue split with developers of Apps sold through Android Market/Google Play. Prior to 2012, Google's reported Android App Revenue represented Google's 30 percent developer revenue split less amounts Google paid to its carrier Distribution Partners.⁶²⁷ Since 2012, Google's reported Android App Revenue has been reported as Google's entire 30 percent revenue split, and amounts paid to carriers are recorded to Cost of Sales.

11.2.3 Digital Content

290. Google began selling music, movies and other Digital Content through Android Market/Google Play in 2011. As reflected in **Figure 45** annual revenue from sales of Digital Content increased from \$14.8 million in 2011 to an annualized total of [REDACTED] in 2015. As **Figure 45** illustrates, Google recorded revenue from sales of Digital Content of [REDACTED] from 2011 to 2015.

Figure 45

Android Digital Content Revenue⁶²⁸

<i>(in millions)</i>	2008	2009	2010	2011	2012	2013	2014	2015 [1]	Total
Digital Content	\$0.0	\$0.0	\$0.0	\$14.8	\$105.8				

[1] Q4 2015 is a Google forecast.

291. According to Mr. Gold, Digital Content Revenues reflects 100 percent of the amounts paid to download Digital Content through Android Market/Google Play. According to Mr. Gold, all costs associated with payments to content creators/owners and Google Distribution Partners are recorded to Cost of Sales.⁶²⁹

⁶²⁶ See Exhibit 8.

⁶²⁷ Deposition of Jonathan Gold, December 11, 2015, p. 73.

⁶²⁸ See Exhibit 8.

⁶²⁹ Deposition of Jonathan Gold, December 11, 2015, pp. 38–39, 69–70, 72.



11.2.4 Android Ad Revenue

292. As illustrated in **Exhibit 8.1** and summarized in **Figure 46**, Google earned Ad Revenue from Internet searches conducted from Android devices in the total amount of [REDACTED] during the period 2008 through 2015.

Figure 46
Google Annual Ad Revenue from Android Devices⁶³⁰

(in millions)	2008	2009	2010	2011	2012	2013	2014	2015 [1]	Total
Android Ad Revenue	\$0.7	\$15.7	\$120.1	\$569.4	-	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Search (AdWord)	-	-	-	-	1,444.9	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
AdSense	-	-	-	-	238.6	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Display	-	-	-	-	468.9	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total Android Ad Rev.	<u>\$0.7</u>	<u>\$15.7</u>	<u>\$120.1</u>	<u>\$569.4</u>	<u>\$2,152.4</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[1] Annualized based on six-month period ending June 30th.

293. As **Figure 46** illustrates, the Ad Revenue Google realized from Internet searches from Android devices grew from \$0.7 million in 2008, to an annualized total of [REDACTED] in 2015. Consistent with Google's overall business, [REDACTED]

11.2.5 Total

294. **Figure 47** is a summary of the revenue Google reported from the Android platform. As **Figure 47** illustrates, Google reported total revenue of [REDACTED] 2008 to 2015 from the Android platform.

Figure 47
Summary of Annual Android Revenue⁶³¹

(in millions)	2008	2009	2010	2011	2012	2013	2014	2015 [1]	Total
Ad Revenue	\$0.7	\$15.7	\$120.1	\$569.4	\$2,152.4	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Apps [2]	0.0	1.1	8.0	36.2	136.1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Digital Content [2]	0.0	0.0	0.0	14.8	105.8	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hardware [2]	0.0	0.0	115.2	0.0	303.5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Gross Revenue	<u>\$0.7</u>	<u>\$16.8</u>	<u>\$243.3</u>	<u>\$620.4</u>	<u>\$2,697.8</u>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[1] Ad Revenues annualized based on six-month period ending June 30th.

[2] Q4 2015 revenue is a Google forecast.

⁶³⁰ In millions. See Exhibit 8.1.

⁶³¹ See Exhibit 8.



11.3 Quantification of Infringement-Related Costs and Expenses

11.3.1 Android-Related Cost of Sales

295. During the relevant time period, Google regularly reported the profits it earned from the Android Platform to its Android Operating Committee, as well as to other Google executives. The profit and loss statements contained within contemporaneously-prepared business records, in addition to other data, provide a basis for quantifying the costs and expenses that actually helped generate the revenues I have determined are causally connected to the Infringed Java Copyrights.⁶³² **Exhibit 7** is a summary of Android-related annual operating results as reported by Google.

296. According to Mr. Aditya Agarwal, Senior Financial Analyst for Android:

*'Generally speaking, if an expense can be directly attributed to our product area and is coded to, let's say, to an Android specific cost center or any Android specific unique identifier, that gets allocated to the product – to the Android product P&L. Any expense that's—that's something that is shared across different teams and cannot be – cannot be coded as something dedicated directly to Android, those don't go in any – any product-specific P&Ls.'*⁶³³

11.3.1.1 Google's Overall Annual Reported Total Traffic Acquisition Costs (TAC)

297. Google Traffic Acquisition Costs represent fees paid to both Google Network Members for permitting ads to be placed on their websites, and Google Distribution Partners for directing Internet traffic on their networks or devices to Google websites. Google's SEC filings disclose the annual amounts Google pays to both Network Members and Distribution Partners. **Figure 48** below is a summary of Google's TAC as reported by Google in its Forms 10-K for the years 2011 to 2014.

Figure 48
Google Reported TAC⁶³⁴

Traffic Acquisition Costs	2011	2012	2013	2014
Network Members	\$7,294	\$8,791	\$9,293	\$9,864
Distribution Partners	1,517	2,165	2,965	3,633
Total	\$8,811	\$10,956	\$12,258	\$13,497

⁶³² Order Re Willfulness and Bifurcation, *Oracle America Inc. v. Google Inc.*, No. C 10-03561, September 18, 2015, p. 6.

⁶³³ Deposition of Aditya Agarwal, May 10, 2012, p. 175.

⁶³⁴ Google 2013 Form 10-K, p. 61; Google 2014 Form 10-K, p. 52.



11.3.1.2 Android-Related TAC Paid to Google Network Members

298. The “Traffic Acquisition Costs” line item reflected in **Exhibit 7** represents only estimated amounts Google paid to its Network Members to permit advertisements to be placed on their websites.⁶³⁵ For the years 2008 to 2010, these amounts were reported by Google in the Q1 2009 OC Review, the Q4 2010 OC Review, and the Q1 2011 OC Review Reports to Google’s Android Operating Committee.

299. The Android-related financial data recently produced by Google for the years 2011 to 2015⁶³⁶ do not include the TAC Google paid to its Network Members for Ad Revenue realized from Android devices. In order to estimate these costs for the years 2011 to 2014, I applied Google’s total annual Network Member TAC as percentages of Google’s total annual Ad Revenue to Google reported annual Android Ad Revenue. **Exhibit 7.1** is a summary of these annual calculations. For the year 2015, I applied the percentage of Android TAC provided by Mr. Gold during his deposition. According to Mr. Gold, Android TAC as a percentage of Android Ad Revenue is about 15 percent.⁶³⁷

300. As reflected in **Exhibit 7**, I have subtracted from total Android-related revenue an estimated [REDACTED] for TAC paid by Google to its Network Members during the period 2008 through 2015.

11.3.1.3 Apps

301. According to a December 2013 Evercore analyst report, “Google Play gives Google control over Android-based commerce, [REDACTED]. While the [REDACTED] largely resides currently with Android OEM and carrier partners, we see this trend beginning to move in Google’s favor as strong overall Play traction continues.”⁶³⁸

302. Because Google recognizes only its [REDACTED], App-related Cost of Sales does not include amounts paid to App developers. Instead, App-related Cost of Sales is comprised of amounts Google pays to carrier Distribution Partners as incentives to promote and support Android devices.⁶³⁹ Google also records carrier Distribution Partner payments to Digital Content Cost of Sales.⁶⁴⁰

303. **Figure 21** above reflects the annual Android-related TAC paid to 14 carrier Distribution Partners in the four Google geographies of: 1) Americas, 2) Japan, 3) Korea and 4) Europe,

⁶³⁵ TAC paid by Google to Distribution Partners relating to the Android platform are addressed below.

⁶³⁶ For example, GOOG-00022386 and GOOG-00103813.

⁶³⁷ Deposition of Jonathan Gold, December 11, 2015, p. 189.

⁶³⁸ Evercore Equity Research, Google Inc., December 13, 2013, p. 1.

⁶³⁹ Deposition of Jonathan Gold, December 11, 2015, pp. 71 – 72 and 185; Deposition of Aditya Agarwal, April 8, 2011, pp. 56 – 57; Deposition of Reto Meier, December 11, 2015, pp. 93-94.

⁶⁴⁰ Deposition of Jonathan Gold, December 11, 2015, pp. 71 – 72.



Middle East and Africa.⁶⁴¹ **Figure 21** is from a presentation prepared by Mr. Gold, Google's Finance Director, in May 2015.⁶⁴² According to this presentation, Google paid its carrier Distribution Partners a total of [REDACTED] in 2013, and about [REDACTED] in 2014.⁶⁴³ These annual totals are less than the total Cost of Sales reported for both Apps and Digital Content in 2013 and 2014, as summarized by **Exhibit 7**. Thus, I have concluded that the annual amounts reported by Google as App and Digital Content Cost of Sales captures all of the Android-related TAC paid by Google to its carrier Distribution Partners.

304. I would note that, notwithstanding the language of any co-Development Device Strategic Marketing Agreement between Google and a carrier Distribution Partner,⁶⁴⁴ the amounts recorded to Apps and Digital Content Cost of Sales for Google payments to carrier Distribution Partners are more broadly related to the adoption of the Android platform and distribution of Android devices. These payments do not relate, for example, to a cost incurred by Google to create an App or the Digital Content sold through Android Market/Google Play. Therefore, a portion of the TACs recorded to Apps and Digital Content Cost of Sales could properly be allocated to other Android-related revenue such as Android Ads, or alternatively, to Android-related advertising or promotional expense.

305. As **Exhibit 7** illustrates, Google reported about [REDACTED] of App-related Cost of Sales during the years 2008 to 2015.

11.3.1.4 Digital Content

306. According to Mr. Gold, Google reports 100 percent of its revenues from the sale of Digital Content through Android Market/Google Play. According to Mr. Gold, all costs associated with payments to content owners are recorded to Cost of Sales.⁶⁴⁵ In addition, amounts paid to Google Distribution Partners (OEMs and carriers) are likewise reflected in Digital Content Cost of Sales.

307. As **Exhibit 7** illustrates, Google reported Digital Content Cost of Sales in the total amount of [REDACTED] during the five-year period 2011 to 2015. As indicated in **Exhibit 7**, Google reported Digital Content Cost of Sales exceeded Digital Content Revenues in every year from 2011 to 2015. As indicated above, the portion of the Cost of Sales representing TAC payments to carrier Distribution Partners could properly be allocated to other Android-related revenue such as Android Ads, or alternatively, to Android-related advertising or promotional expense.

⁶⁴¹ GOOG-00130338-386 at 362.

⁶⁴² GOOG-00130338-386 at 338 and 362; Deposition of Jonathan Gold, December 11, 2015, p. 177.

⁶⁴³ \$352 + \$246 + \$237 + \$52 = \$887 and \$558 + \$302 + \$344 + \$67 = \$1,271. GOOG-00130338-386 at 362.

⁶⁴⁴ See, for example, the 2009 Verizon Agreement, GOOGLE-03169550-603.

⁶⁴⁵ Deposition of Jonathan Gold, December 11, 2015, pp. 71 – 73.



11.3.1.5 Hardware

308. According to Mr. Gold, included within Hardware revenue are smartphones, tablets, watches, and a few other things such as accessories.⁶⁴⁶ Hardware-related Cost of Sales represents amounts paid to third-party OEMs for the cost to manufacture these Android devices.

11.3.1.6 Infrastructure and Other Cost of Sales

309. According to Mr. Gold, Infrastructure and Other Cost of Sales includes the cost of items used by Google in the manufacturing and shipping of Android-related products and services, including such things as Google laptop computers for employees associated with customer support and “payment processing.”⁶⁴⁷

11.3.2 Quantification of Related Operating Expenses

310. The Android Profit and Loss Statements presented to the Android Operating Committee and other Google executives include the Operating Expenses Google incurred in connection with the development, promotion and administration of the Android platform. The Operating Expenses incurred in connection with Android are set forth in the following subsections.

11.3.2.1 Engineering

311. According to Mr. Gold, Engineering expense includes the salaries and bonuses of software engineers “with a handful of other one-off expenses” such as contract employee compensation, engineering-related equipment, and licensing related expenses.⁶⁴⁸ The software engineers are associated with either Android or Google Play.⁶⁴⁹ According to Mr. Gold, these software engineers are not the third-party developers that create the Apps that are offered through Google Play.⁶⁵⁰

11.3.2.2 Product Management

312. According to Mr. Gold, Product Engineering Management is “mostly employee salaries and bonuses” for software engineers.⁶⁵¹

11.3.2.3 Sales and Marketing

313. Sales and Marketing expense is comprised of the salaries and other compensation paid to sales and business development people involved in Android-related activities.⁶⁵² This line item also

⁶⁴⁶ Deposition of Jonathan Gold, December 11, 2015, p. 70.

⁶⁴⁷ Deposition of Jonathan Gold, December 11, 2015, pp. 107 – 108, 126.

⁶⁴⁸ Deposition of Jonathan Gold, December 11, 2015, pp. 44 - 45.

⁶⁴⁹ Deposition of Jonathan Gold, December 11, 2015, pp. 81 – 82.

⁶⁵⁰ Deposition of Jonathan Gold, December 11, 2015, pp. 78 – 79.

⁶⁵¹ Deposition of Jonathan Gold, December 11, 2015, pp. 78 – 79.

⁶⁵² Deposition of Jonathan Gold, December 11, 2015, pp. 42 – 43.



includes the cost of advertising campaigns undertaken by third-parties for Android as well as the cost of third-party industry reports.

11.3.2.4 Legal

314. Legal expense includes the fees paid to Google's outside legal counsel, as well as amounts paid by Google to settle lawsuits.⁶⁵³ According to Mr. Gold, this line item also includes costs associated with in-house counsel.⁶⁵⁴

11.4 Summary of Profits Attributable to the Infringement

315. **Exhibit 7** is a summary of the annual profits Google reported to the Android Operating Committee and other Google executives as related to the Android platform for the eight-year period 2008 to 2015.⁶⁵⁵ As **Exhibit 7** illustrates, Google generated Android-related profits of [REDACTED] during this time period.

11.5 Evidence Supporting the Profitability of Android

316. Google's business records and other publicly available information confirm the fact that Android has been a highly profitable business endeavor for Google. The following is a summary of certain evidence of the profits Google realized from Android.

Deposition Testimony

- **Testimony of Aditya Agarwal:** According to Mr. Agarwal, then a Senior Financial Analyst at Google,

Q. Would you agree with the statement that Android is hugely profitable?

*A. Yes.*⁶⁵⁶

Earnings Calls

- **Google Q3 2010 Earnings call – Mr. Schmidt:** "...Android, which is well past anything that I had ever hoped for and looks like it's on its way to be a huge, huge success within our devices, devices, open model for access, lots and lots of innovation, more dynamic, more competition than any other part of the platform."⁶⁵⁷

⁶⁵³ Deposition of Jonathan Gold, December 11, 2015, p. 80.

⁶⁵⁴ Deposition of Jonathan Gold, December 11, 2015, pp. 80 - 81.

⁶⁵⁵ Android devices were first sold in November 2008. 2015 data is annualized based on the six-month period ending June 30, 2015 for Ad revenue. App revenues, Digital Content revenues, and Hardware revenues are Google forecasts for Q4 2015.

⁶⁵⁶ Deposition of Aditya Agarwal, April 8, 2011, p. 112.

⁶⁵⁷ Google Inc. Q3 2010 Earnings Call Transcript, <http://www.morningstar.com/earnings/printtranscript.aspx?id=18282869>



- **Google Q3 2010 Earnings call – Mr. Schmidt:** “People say, well how do you make money from that? Well, let’s start with the fact that the evidence we have is that people who use Android search twice as much as everything else. So, clearly, there is more revenue associated with those searches. And another thing of course is if they are using Android systems, revenue that we share in the search as we shared with operator but not with anybody else. So, again it’s more lucrative. So, not only there are more searches and there is more apps, but it’s also more lucrative.”⁶⁵⁸
- **Google Q3 2010 Earnings call – Mr. Schmidt:** “Android is hugely profitable and we maintain the anti-segmentation and other things by a series of contracts around the store and so forth and so on.”⁶⁵⁹
- **Google Q3 2010 Earnings call – Mr. Rosenberg:** “Finally, third big number, \$1 billion. Mobile is on an annualized run rate of over \$1 billion. This means the people who are accessing our products and services through their mobile phones are adding a \$1 billion annually to our existing revenue streams. Clearly, this is the future of search in the Internet, more people in more countries coming online from these smartphones. Our mobile search queries have grown five times over the past couple of years. And of course, a lot more of those queries are now coming from Android phones.”⁶⁶⁰
- **Google Q3 2012 Earnings Call – Lawrence Page:** “...mobile search queries and mobile commerce are growing dramatically across the world.”⁶⁶¹
- **Google Q3 2012 Earnings Call – Lawrence Page:** “This time last year, I announced that our run-rate for mobile advertising hit \$2.5 billion. That seemed like a pretty big number even for Google. But now we have built up additional mobile revenue from users paying for content and apps in Google Play. Including these new sources grossed up, I can announce our new run-rate for mobile is now over \$8 billion. That’s quite a business.”⁶⁶²

⁶⁵⁸ Google Inc. Q3 2010 Earnings Call Transcript, <http://www.morningstar.com/earnings/printtranscript.aspx?id=18282869>.

⁶⁵⁹ Google Inc. Q3 2010 Earnings Call Transcript, <http://www.morningstar.com/earnings/printtranscript.aspx?id=18282869>.

⁶⁶⁰ Google Inc. Q3 2010 Earnings Call Transcript, <http://www.morningstar.com/earnings/printtranscript.aspx?id=18282869>.

⁶⁶¹ Google Inc. Q3 2012 Earnings Call Transcript, <http://seekingalpha.com/article/934071-googles-ceo-discusses-q3-2012-results-earnings-call-transcript?part=single>.

⁶⁶² Google Inc. Q3 2012 Earnings Call Transcript, <http://seekingalpha.com/article/934071-googles-ceo-discusses-q3-2012-results-earnings-call-transcript?part=single>.



- **Google Q1 2015 Earnings Press Release – Patrick Pichette:** “Google. ‘We continue to see great momentum in our mobile advertising business and opportunities with brand advertisers.’⁶⁶³

Publicly Available Information

- **Venturebeat.com:** “Google is on-track to make \$1 billion in revenue from mobile this year.”⁶⁶⁴
- **New York Times:** “Android’s contribution to Google’s revenue, its strategic value probably accounts for \$30 billion to \$50 billion of Google’s \$190 billion market Capitalization.”⁶⁶⁵
- **June 2011 Fortune Magazine Article:** In June 2011, Fortune Magazine published an article entitled “100 Million Android Fans Can’t be Wrong.” According to this article:

“Android device makers often build a search button into the hardware, and most users can find a search widget on the home screen. But Rubin says Android phones in general are more integrated with people’s lives. ‘That pervasiveness pays off on people doing more searches, but people do more of everything,’ he adds. . . . Although Google doesn’t break out Android specifically, Rubin says Android is profitable and cash-flow positive, and it’s all through ads.”⁶⁶⁶

- **Mr. Rubin Interview at December 2010 Dive Into Mobile Conference:** During a December 2010 conference sponsored by All Things Digital, Mr. Rubin was interviewed and confirmed the profitability of the Android platform. According to Mr. Rubin, Google was “making money on the advertising that’s generated through Android.”⁶⁶⁷ Mr. Rubin later added that “I can just do the Google thing. Which is an ad-based business model. And we’re profitable.”⁶⁶⁸
- **May 2015 Introduction to Google** – A May 2015 Google presentation entitled “Introduction to Android” reported that Google realizes profit of [REDACTED] Android device during its “lifetime,” [REDACTED] of which was attributable to Search Ads.⁶⁶⁹

⁶⁶³ Google Inc. Announces First Quarter 2015 Results,

https://investor.google.com/earnings/2015/Q1_google_earnings.html.

⁶⁶⁴ <http://venturebeat.com/2010/10/14/google-making-1-billion-a-year-from-mobile/>.

⁶⁶⁵ New York Times, Android is No. 1, But Google Says It Still Makes Little Money.,

http://bits.blogs.nytimes.com/2012/01/20/android-small-revenues/?_r=0

⁶⁶⁶ “100 million Android fans can’t be wrong.” Fortune.com, June 16, 2011.

⁶⁶⁷ <http://allthingsd.com/20101214/d-dive-into-mobile-the-full-interview-video-of-google-androids-andy-rubin/>, minute 20:40 to 20:48.

⁶⁶⁸ <http://allthingsd.com/20101214/d-dive-into-mobile-the-full-interview-video-of-google-androids-andy-rubin/>, minute 21:00 to 21:25.

⁶⁶⁹ GOOG-00130338 – 386 at 343.



12. STATUTORY DAMAGES

317. There are four copyrighted works at issue in this case, each of which, I understand, has been copied by Google into various version of Android as established during the first trial of this case and as set forth in the Zeidman Report with respect to the new versions of Android. The four copyrighted works are:

- Certificate of Registration, Java 2 Standard Edition 1.4, TX0006196514, Trial Ex. 464;
- Certificate of Registration, Java 2 Standard Edition 5.0, TX0006066538, Trial Ex. 475;
- Certificate of Registration, Java Standard Edition 6, TX0006848555, Trial Ex. 659;
- Certificate of Registration, Java Standard Edition 7, TX0008125950.⁶⁷⁰

318. Pursuant to the Copyright Act, Oracle is entitled to one award of statutory damages per work for Google's infringement, ranging from \$750-\$30,000 per work for non-willful infringement. For willful infringement, Oracle may be awarded up to \$150,000 per work.

319. I have been asked, based on my professional experience and in light of the available evidence, to calculate the appropriate statutory damages figure. I understand that Oracle may elect to receive statutory damages under the Copyright Act instead of actual damages and disgorgement of profits.

320. It is my conclusion, based on my review of evidence, that due to the significant lost opportunity costs to Oracle arising from Google's infringement of the copyrighted Java works (as set forth herein) and the magnitude of the benefit obtained by Google as a result of their copying of the works (also as set forth in this report), the benefits to Google far exceed the available statutory range, and thus Oracle should be awarded the maximum amount available under the statute.

321. If Google's infringement is not found to be willful, Oracle should be awarded statutory damages of \$30,000 per work for a total of \$120,000.

322. If Google's infringement is found to be willful, Oracle should be awarded statutory damages in the amount of \$150,000 per work for a total of \$600,000.

13. PREJUDGMENT INTEREST

323. From an economic analysis standpoint, a time-value-of-money award would be necessary to compensate Oracle for the loss of use of funds during the damages period. However, I understand that an award of prejudgment interest is a legal matter and that the Court has substantial discretion in determining the interest rate and compounding method to be awarded.

⁶⁷⁰ OAGOOGLE3000000504-511; see also OAGOOGLE3000000500-503, OAGOOGLE3000000512-517, OAGOOGLE3000000496-499, OAGOOGLE3000000518-523.



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I have not prepared any prejudgment interest calculations as of this date, but am prepared to do so if requested by the Court.

14. SIGNATURE

I declare under penalty of perjury that the forgoing is a true and correct summary of my opinions in this matter,

A handwritten signature in black ink, appearing to read "James E. Malackowski".

James E. Malackowski

January 8, 2016



OCEAN TOMO®
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November 24, 2015

JAMES E. MALACKOWSKI CURRICULUM VITAE

James E. Malackowski is the Chairman and Chief Executive Officer of Ocean Tomo, LLC, the Intellectual Capital Merchant Banc™ firm providing industry leading financial products and services related to intellectual property including financial expert testimony, valuation, strategy consulting, proprietary research products, investment services, risk management products, innovation management services and transaction brokerage. Ocean Tomo assists clients – corporations, law firms, governments and institutional investors – in realizing Intellectual Capital Equity® value broadly defined. Subsidiaries of Ocean Tomo include: Ocean Tomo Risk Management, LLC; Ocean Tomo Asset Management LLC; OTI Data Networks, LLC; Patent Marking, LLC; and Ocean Tomo Capital, LLC – publisher of the Ocean Tomo 300® Patent Index family (NYSE: OTPAT) and Ocean Tomo Investments Group, LLC, a registered broker dealer. Ocean Tomo is the creator of the live public open cry auction marketplace for intellectual property and the exclusive source for Ocean Tomo Ratings™.

Mr. Malackowski is a founding and continuous member of the IP Hall of Fame Academy. He has been recognized annually since 2007 by leading industry publications as one of the 'World's Leading IP Strategists'. Significantly, Mr. Malackowski is listed among "50 Under 45" by *IP Law & Business*™, included in the *National Law Journal*'s inaugural list of 50 Intellectual Property Trailblazers & Pioneers; and, named as one of "The Most Influential People in IP" by *Managing Intellectual Property*™. Mr. Malackowski was named as 1 of 50 individuals, companies and institutions that framed the first 50 issues of *IAM Magazine* as well as 1 of 60 leading global Economics Expert Witnesses by the same publication in 2014. In 2011 Mr. Malackowski was selected by the World Economic Forum as one of less than twenty members of the Network of Global Agenda Councils to focus on questions of IP policy. In 2013 he was inducted into the Chicago Area Entrepreneurship Hall of Fame by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration.

Mr. Malackowski has advised clients and counsel on business valuation issues as well as all phases of the technology transfer process. He has substantial experience as a Board Director for leading technology corporations and research organizations as well as companies with critical brand management issues. He is Past President of The Licensing Executives Society International, Inc. as well as its largest chapter, LES USA & Canada, Inc. Today, Mr. Malackowski focuses his non-for-profit efforts with organizations leveraging science and innovation for the benefit of children, including those located in lesser developed countries. He is a Director of the Stanley Manne Children's Research Institute and has served since 2002 as a Trustee or Director of Invent Now, Inc., an organization providing summer enrichment programs for more than 90,000 students annually. He is the Founder of the Chicago based Center for Applied Innovation (CAI), an Illinois non-for-profit corporation created to manage education, public policy outreach and related economic activity around applied technology and intellectual property rights.

Mr. Malackowski is a frequent speaker on emerging technology markets and related financial measures. He has addressed mass media audiences including Bloomberg Morning Call, Bloomberg Evening Market Pulse, Bloomberg Final Word, CNBC Closing Bell, CNBC On the Money, CNBC Street Signs, CBS News Radio and Fox Business National Television as well as other recognized news-based internet video channels. Mr. Malackowski is a judge on behalf of the Illinois Technology Association's CityLIGHTS™ Innovation Awards program and has also appeared as a judge on PBS's *Everyday Edisons*.



On more than fifty occasions, Mr. Malackowski has served as an expert in U.S. Federal Court, U.S. Bankruptcy Court, State Court, the Ontario Superior Court of Justice or the International Trade Commission on questions relating to intellectual property economics including the subject of business valuation, reasonable royalty, lost profits, price erosion, commercial success, corrective advertising, creditor allocations, Hatch Waxman Act market exclusivity, business significance of licensing terms including RAND obligations, and equities of a potential injunction. As an inventor, Mr. Malackowski has more than twenty issued U.S. patents. He is a frequent instructor for graduate studies on IP management and markets and a Summa Cum Laude graduate of the University of Notre Dame majoring in accountancy and philosophy. Mr. Malackowski is Certified in Financial Forensics, a Certified Licensing Professional and a Registered Certified Public Accountant in the State of Illinois.

**PRINCIPAL
EXPERIENCE**

Co-Founder, Chairman and Chief Executive Officer, *Ocean Tomo, LLC*, July 1, 2003 to present. Mr. Malackowski is responsible for all aspects of the firm's merchant banking practice.

Founder, *The Intellectual Property Exchange International, Inc.* Mr. Malackowski guided initial product development of IPXI and recruitment of executive management. In 2011, IPXI was funded by an industry consortium including the Chicago Board Options Exchange. Mr. Malackowski was the Chair or Co-Chair of the Exchange from inception to February 26, 2015.

President and Chief Executive Officer, *IP Equity Management, LLC*, doing business as Duff & Phelps Capital Partners, March 1, 2002 to June 30, 2003. The firm's intellectual property structured finance efforts were consolidated with Ocean Tomo on July 1, 2003.

Principal and Founder, *VIGIC Services, LLC*, July 1, 2000 to February 28, 2002. Mr. Malackowski identified and evaluated intellectual capital based private equity investment opportunities and served as an advisor to four completed transactions.

Principal and co-Founder, *IPC Group LLC*, August 1, 1988 – June 30, 2000. Mr. Malackowski also held the offices of President and CEO and was a Board member / chairman of the firm. Along with four co-founders, Mr. Malackowski grew IPC Group to become the largest professional services firm specializing in intellectual property valuation and strategy consulting. IPC Group was sold in 1999 later changing its name to InteCap.

Executive Consultant, *Peterson & Co. Consulting*, Chicago, June 3, 1985 – July 30, 1988. Mr. Malackowski began with Peterson as a Staff Consultant and was the firm's quickest promotion to both Senior Consultant and Executive Consultant. Mr. Malackowski helped to establish the firm's intellectual property litigation and valuation practice. Peterson & Co. was sold to Saatchi & Saatchi PLC in 1988.

Chairman and CEO, *JEMAN Technologies, Inc.* 1995 – 1999. Mr. Malackowski led the company's efforts to develop new technologies related to wireless direct response services. JEMAN was sold to ewireless, Inc. in 1999 as part of a venture transaction funded by Bedrock Capital Partners and Tredegar Investments.



**NON-PROFIT AND
ASSOCIATION
EXPERIENCE**

Mr. Malackowski has been active in The Licensing Executives Society (LES) locally, nationally and internationally. LES is the premiere global professional association of technology transfer and intellectual asset management professionals with more than 10,000 members in more than 32 countries.

Mr. Malackowski is Past President of the Licensing Executives Society International, LLC, where his experience included the following positions:

- Chair, Past President's Council (2012 – 2013)
- President and Member of the Board (2011 - 2012)
- President Elect and Member of the Board (2010 - 2011)
- Secretary and Member of the Board (2007 - 2010)
- Member and Permanent Alternate, Board of Delegates (1992 - 2005)
- Past Chair, Membership, Investment, Education, Long-range Planning and Global Technology Impact Forum Committees.

Mr. Malackowski's term as President of LESI has been recognized for creation of the LESI Global Technology Impact Forum and concurrent Invent For Humanity™ Technology Transfer Exchange Fair; formalizing the National Presidents' Council; establishing the position of a permanent Executive Director; and, restructuring the leadership of LESI committees utilizing a Chair, Past Chair, Chair Elect ladder combined with functional responsibilities for committee Vice Chairs. This later organizational stamp is based largely on Mr. Malackowski's experience as President of LES USA & Canada described below where he led a restructuring of the Board from a regional to a functional focus for each officer and Trustee. As with his tenure at his national Society discussed below, Mr. Malackowski led a financial turn-around returning LESI to positive cash flow following its' only two years of loss.

Mr. Malackowski is also Past President of The Licensing Executives Society (USA and Canada), Inc. where he held numerous offices in the organization including:

- President and Member of the Board (2001 – 2002)
- International Vice President and Member of the Board (2000)
- Treasurer and Member of the Board (1996 -- 1999)
- Trustee and Member of the Board (1992 – 1996)
- Chair, Annual Meeting in Miami Beach (1998) and the Summer Meeting in Chicago (1997)

Mr. Malackowski presided over a restructuring of the LES USA & Canada Board and a financial turn-around returning the organization to positive cash flow following its only two years of loss. Mr. Malackowski is the youngest President to hold office at LES USA & Canada as well as at LES International.

In 2007, Mr. Malackowski was the Founding Chair of the Board of Governors for what is now Certified Licensing Professionals, Inc., administrator of the Certified Licensing Professional (CLP) program for professionals in the fields of



licensing, business development and commercialization of intellectual property. More than 1,000 individuals involved in patenting, marketing, valuation, IP law, negotiation, and intellectual asset management have earned the CLP certification. CLP, Inc. is a 501(c)(6) organization whose mission is to elevate the licensing profession through knowledge and standards.

Mr. Malackowski extends significant time to non-profit activities directed towards a further understanding of the economic importance of innovation and intellectual property, in both the United States and developing economies. These efforts include:

- Judge, Illinois Technology Association, CityLIGHTSTM Innovation Awards (2013 -)
- Member, World Economic Forum Network of Global Agenda Councils (2011 - 2012)
- Director, International Intellectual Property Institute, Washington D.C., (2002 - 2007)
- Resident Advisor, U.S. Information Agency, (1999)
- Resident Advisor, U.S. Department of Commerce Commercial Law and Development Program (1997)
- Founder and Chairman, The Center for Applied Innovation, Inc. (2004 -)

In addition to his University instruction described herein, Mr. Malackowski focuses his non-for-profit efforts with those organizations leveraging science and innovation for the benefit of children.

- Director, Children's Research Fund (2013); Co-Chair Annual Fund Campaign (2013)
- Director, Invent Now, Inc. (2006 -); Trustee and Director, National Inventors Hall of Fame, Inc. (2001 - 2006); and, Member, NIHF Board Finance Committee (2006 -). These organizations provide summer enrichment programs for more than 90,000 students annually including [Camp Invention™](#) for kids in grades 1-6 (and their parents and teachers); [Collegiate Inventors Competition™](#) for college students (and their mentors); and, [Club Invention™](#) for kids in grades 1-6 (and their parents and teachers).
- President's Council, Chicago Museum of Science and Industry (2005 - 2011) including participation on the Education Advisory Committee (2007 - 2009) and the Alternative Revenue Committee (2008 - 2011)
- Director, Stanley Manne Children's Research Institute (2009 -) including Chair of the Board's Technology Transfer Committee (2014 -) and the Strategic Planning Resources Committee (2011 - 2012)

Mr. Malackowski is the Founder of the Center for Applied Innovation, a Chicago based non-for-profit with both local and international programs. CAI was created to manage education, public policy outreach and related economic activity around applied technology and intellectual property (IP) rights in the State of Illinois and around the world.



- CAI created and patented the first commoditized contract for technology licensing, the Unit License Right™. This innovation has been licensed to the Chicago-based Intellectual Property Exchange International.
- Under Mr. Malackowski's continued leadership as Chairman, CAI organizes the Invent for Humanity™ Technology Transfer Exchange Fair (InventforHumanity.org) launched in January, 2012, in Geneva, Switzerland. Invent for Humanity showcases field-ready, sustainable innovations, known as "appropriate technologies", leveraging the experience of licensing professionals to match and structure the actual transfer of such technology to meet recognized needs of emerging market economies.

Mr. Malackowski's association and non-profit activities are informed in part by his participation in the Harvard Business School Executive Education Program on Governing for Nonprofit Excellence, November 2000.

RELATED OFFICES

Berg, LLC, Member, Council of Advisors, Senior Advisor, Intellectual Property Licensing & Innovation (2012 -)

Curious Networks, Inc., Director, (1999 - 2000), Co-Chair of the Board's Strategic Partnership Committee. Mr. Malackowski led the company's first and second round of venture funding.

ewireless, Inc. (f/k/a JEMAN Holdings, Inc. d/b/a Cellular Linking), Director, (1995-1999, 2000-2002)

Ford Global Technologies, Inc., Ford Motor Company, Director (1997 - 2001). Mr. Malackowski advised Ford Motor Company on the original business strategy which led to the formation of FGTI. FGTI was the largest known technology management company in the United States during Mr. Malackowski's term.

Infocast, Corporation (OTC BB: IFCC.OB), Director (2001-2002). Member of the Audit and Compensation Committees. Mr. Malackowski led the transition of the company's senior management team and continued U.S. based funding efforts.

Insignis, Inc., Director (2000 - 2002) Mr. Malackowski led the company's first round of venture funding. Insignis is a Chicago based provider of institutional financial data services.

Solutionary, Inc., Director (2000 - 2013). Arranged and advised on Solutionary's asset acquisition of S3Networks effective August 31, 2001 and sale to strategic buyer in 2013. Member of the Board's Compensation Committee.

TuShare, LLC, Advisor (2012 -)

422, Inc., Director (2002 - 2003)



EDUCATION AND CERTIFICATION

University of Notre Dame, B.B.A., Bachelor of Business Administration with majors in Accountancy and Philosophy. Graduated Summa Cum Laude, 1985.

Registered Certified Public Accountant, State of Illinois Certificate Number 41,187 issued January 16, 1986; License No. 239.007831; Expires September 30, 2018.

Certified Licensing Professional, Certificate Number 1606 issued July 1, 2008; Expires June 30, 2017.

Certified in Financial Forensics, CFF™, American Institute of Certified Public Accountants, Certificate Number 391 issued July 31, 2008; Expires December 31, 2014.

Accredited in Business Valuation, ABV™, American Institute of Certified Public Accountants, Certificate Number 4278 issued May 31, 2014.

UNIVERSITY INSTRUCTION

John Marshall Law School, Intellectual Property Damages (1992 - 1994)

DePaul University, Intellectual Property Entrepreneurial Finance (2003)

The George Washington University Law School, Intellectual Property Management (2004)

The University of Chicago Graduate School of Business:

- Intellectual Property Investment (2004 - 2006)
- Entrepreneurial Discovery, MBA Course 34705, Adjunct Professors Mark Tebbe and Brian Coe (Fall 2014 - 2015)

Indiana University Kelly School of Business, Intellectual Property Finance (2005)

University of Notre Dame, Mendoza College of Business, Adjunct Instructor:

- MBA Interterm Intensives, Intellectual Property Based Market Transactions, Valuation and Trading (Fall 2006, Fall 2008)
- MBA Executive Program, Course MBAE 70639, Intellectual Property, (Spring Semester 2008)
- MBA Program, Litigation Support and Valuation (Spring 2009)

University of California at Berkeley Haas School of Business, Innovation Markets (2008)

Chicago-Kent College of Law, Adjunct Professor of Law, IP Financial Markets and Legal Principles (Fall 2008)



Rutgers Professional Science Master's Program, Fundamentals of Intellectual Property (Summer 2011)

Northwestern University Kellogg School of Management, MGMT 441-61 and MGMT 441-76 Intellectual Property Management, Clinical Professor James G. Conley (Fall 2012, Spring 2013, Spring 2014, Spring 2015)

University of Texas McCombs School of Business, MBA Course: Open Innovation, Professor Sirkka Jarvenpaa (Spring 2013)

ACTIVE MEMBERSHIPS	American Institute of Certified Public Accountants, Member 01182237 (1985 -) The Economic Club of Chicago (1990 -) The Licensing Executives Society (1988 -) Young Presidents' Organization - World President's Organization (2006 -)
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RECOGNITION AND AWARDS	Individually, Mr. Malackowski has been recognized for his expertise as well as his work in developing markets for intellectual property transfer including:
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- Named to the *National Law Journal's* inaugural list of 50 Intellectual Property Trailblazers & Pioneers. (August 2014)
- Named as 1 of 60 leading global Economics Expert Witnesses in the *IAM Patent 1000, IAM Magazine*. Selection based on interviews by IAM researchers with more than 100 patent litigators. (May 2014)
- Inductee, Chicago Area Entrepreneurship Hall of Fame as selected by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration, (2013; 28th Year of Program)
- Named as 1 of 50 Individuals, Companies and Institutions that Framed the First 50 Issues of *IAM Magazine*, November / December 2011.
- "IP Personalities of 2008", *IAM blog* by Joff Wild, Editor
- "IAM Strategy 300: The World's Leading IP Strategists", *IAM Magazine* (2012-2015)
- "IAM Patent 1000: The World's Leading Patent Professionals", *IAM Magazine* (2015)
- "World's 250 Leading IP Strategists", *IAM Magazine* (2009-2011)
- "50 Under 45", *IP Law & Business*™ (2008)
- "The Most Influential People in IP", *Managing Intellectual Property*™ (2007)
- Member, IP Hall of Fame Academy (2007-)
- Mediator and Arbitrator, World Intellectual Property Organization, (1994)

Ocean Tomo as a firm has been likewise recognized for its accomplishments including:

- Ocean Tomo was recognized as a member of the *2015 Inc. 5000*® list of fastest-growing private companies in America.



- Ocean Tomo was honored in 2011 with the “Best of Chicago Award in Investment Advisory Services” by the U.S. Commerce Association (USCA).
- In addition to Mr. Malackowski, Ocean Tomo as a firm was named as 1 of 50 Individuals, Companies and Institutions that Framed the First 50 Issues of *IAM Magazine*, November / December 2011 and the only firm other than Microsoft (2 of 50 mentions) to be recognized multiple times (5 of 50 mentions).
- The firm’s Chicago office was presented the *2011 Alfred P. Sloan Awards for Business Excellence in Workplace Flexibility* after having been finalist for scoring in the top 20% of all firm’s measured nationally.
- Ocean Tomo was recognized in 2010 by Corporate Voices for Working Families for its work-life balance as part of the National Workplace Flexibility Campaign published by *USA Today*.
- Ocean Tomo was recognized as a juried Finalist for the Illinois Technology Association 2010 CityLIGHTS Award for raising the stature of the Illinois technology industry.
- Selected as case study organization for Haas School of Business, University of California, Berkeley (2009)
- Selected as case study organization for Harvard Business School MBA Program (2008)
- Ocean Tomo was named one of 20 small and mid-sized firms recognized as the “Best Places to Work in Illinois” by Best Companies Group in a competition sponsored by the Illinois Chamber of Commerce and the Illinois State Council Society for Human Resource (2007)
- Ocean Tomo Auctions received the 2006 Chicago Innovation Award for most innovative new product or service introduced between January 1, 2005, and July 31, 2006, that uniquely satisfied unmet needs in the marketplace. The award was presented by Kuczmarski & Associates and the *Chicago Sun-Times*.
- Ocean Tomo Auctions was awarded the Department of Commerce Technology Administration & National Knowledge & Intellectual Property Management 2006 Innovator of the Year Award.
- Ocean Tomo was recognized as a “Top Ten IP Newsmakers of 2006” by *IP Law & Business*, Almanac 2006.

Numerous authors and graduate business programs have written case studies about Ocean Tomo and its affiliates including:

- Piscione, Deborah Perry, The Risk Factor, Copyright 2014.
- Houle, David, Entering the Shift Age, Copyright 2013.
- Kuczmarski, Thomas D., Dan Miller and Luke Tanen, Innovating Chicago-Style: How Local Innovators Are Building The National Economy, Copyright 2012.
- Houle, David, The Shift Age, Copyright 2007.
- Chesbrough, Henry, Open Business Models: How to Thrive in the New Innovation Landscape, Copyright 2006.
- Harvard Business School Case Study
- University of California Business School Case Study



**RELATED U.S.
SPEECHES AND
PUBLICATIONS**

“The Determination of a Reasonable Royalty: Hypothetical Negotiation v. A General License Agreement”, The Licensing Executives Society, Chicago Chapter, December 8, 1987.

“The Business Economics of Technology Development”, The Licensing Executives Society, New England Chapter, February 9, 1988.

“The Importance of Protecting Intellectual Property Through Corporate Transition”, Licensing Executives Society, National Meeting, October 18, 1989, Moderator.

“Valuation of Intellectual Property Rights”, The Chicago Bar Association, March 6, 1990.

“Dispute Resolution -- There Are Alternatives!”, Licensing Executives Society, National Meeting, October 22, 1990.

“How to Value a License”, Adding to the Bottomline Through Licensing, LES / John Marshall Law School, November 1, 1990.

“An Advanced Discussion on Licensing and Patent Damages”, Licensing Executives Society, National Meeting, October 28, 1992.

“An Advanced Discussion on Patent Damages”, Licensing Executives Society, National Meeting, October 18, 1993.

Royalty Provisions in Technology License Agreements, Technology Transfers, American Conference Institute, November 15 & 16, 1993.

“Commercializing Technology and the Intellectual Property Quality Management Imperative”, Technology Transfer, American Conference Institute, June 20 & 21, 1994.

“How to Accurately Value Software”, The Software Protection and Litigation Institute, July 28 & 29, 1994.

“IP Damages Advanced Case Studies”, Licensing Executives Society, National Meeting, October 19, 1994.

“Preparation and Presentation of Damages by Outside Consultants”, AIPLA Mid-Winter Meeting, February 1, 1995

“Damages Discovery - An Expert's Perspective”, Intellectual Property Law Association, New York, December 15, 1995.

“Pre-Litigation Damages Techniques: Patents and More”, The Intellectual Property Strategist, March, 1996.



"Corporate Exposures to Copyright, Patent, Trademark, and Trade Secret Claims", Digital Bullets - Digital Shields: A Financial Perspective, American Conference Institute, New York, March 5, 1996.

"IP Management and Taxation - How companies are proactively managing IP assets to maximize shareholder value, including measuring contribution of IP protection to corporate value", American Bar Association, Virginia, April 11, 1996.

"Effectively Select & Use Experts in Trademark & Copyright Cases", AIPLA Spring Meeting, Boston, May 1, 1996.

"The Industry-University Interface: Mechanisms For Technology Transfer", 1996 AUTM Central Region / Licensing Executives Society Chicago Chapter, Chicago, July 21, 1996.

"Valuing Health Care Technologies", Licensing Executives Society Winter Meeting, South Carolina, March 13, 1997.

"Creative Marketing & Packaging - How to Differentiate Yourself in a Competitive Market", CTIA Annual Meeting, Atlanta, February 23, 1998.

"Intellectual Property Valuation: The Latest Techniques from Boardroom and Courtroom", Patent Law Association of South Florida Annual Meeting, Fort Lauderdale, October 22, 1998.

"The Aftermath of *Rite-Hite v. Kelly*", 16th Judicial Conference of the U.S. Court of Appeals for the Federal Circuit, Washington D.C., April 6, 1999.

"Expert Admissibility After Daubert", Wisconsin Academy of Trial Lawyers, Milwaukee, December 3, 1999.

"Intellectual Property Strategic Planning: a Corporate Perspective", Research Directors Association of Chicago, Winter Meeting, January 10, 2000.

"Intellectual Property Asset Management: Linking IP and Corporate Strategy", 44th Annual Conference on Developments in Intellectual Property Law, John Marshall Law School, Chicago, February 25, 2000.

"Boost Your Client's Intellectual Capital IQ: Get Top Management Involved", Corporate Legal Times, October 2000, p. 104.

"Strategic and Financial Opportunities for Privately Held and Public Middle Market Companies: Building Shareholder Value", The Standard Club, Chicago, October 5, 2000.

"Commercializing Intellectual Capital Through Venture Funding", LESI Expanded Board of Directors Meeting and Seminar, Delray Beach, Florida, January 26, 2001; LES Chicago Meeting, May 10, 2001.



"New Paths to Growth: Joint Ventures and Accessing Equity Capital", Panel Presentation and Discussion, LaSalle Street Project Economic Summit, Chicago, May 10, 2001.

ViewPoints, The Newsletter of the Licensing Executives Society (U.S.A. and Canada), Inc., President's Column: Vol. VIII No. 5, Nov. / Dec. 2001, "President Changes the Way LES Does Business"; Vol. VIV No. 1, Jan. / Feb. 2002, "It's Time To Count Our Intellectual Assets"; Vol. VIV No. 2; Vol. VIV No. 3, May / June 2002, "Mid-Year Review"; Vol. VIV No. 4, July / August 2002, "Ethical Issues Related To Intellectual Property".

"Venture Investment Grounded In Intellectual Capital", From Ideas To Assets: Investing Wisely in Intellectual Property, Edited by Bruce Berman, John Wiley & Sons, Inc., 2002.

"Current Issues in Accounting for Intangibles", Congressional Economic Leadership Institute, Panel Presentation and Discussion with Steven H. Wallman, Former Commissioner, United States Securities and Exchange Commission, Washington, DC, May 1, 2002.

"Intellectual Capital Based Corporate Carve-outs: Strategy, Structure and Funding", James E. Malakowski and Suzanne Harrison, The LESI Guide to Licensing Best Practices, Edited by Robert Goldscheider, John Wiley & Sons, Inc., 2002.

"Intellectual Property Finance: Securitization to Venture Capital", American Bar Association Intellectual Property Law Conference, Philadelphia, June 28, 2002.

"The IPI Roundtable: The New Emphasis on Patent Value – Opportunities and Challenges", Washington DC, July 22, 2002.

"Moving Technology from University to Marketplace: Business Creation and the Venture Capital Community", Licensing Executives Society Annual Conference, Chicago, September 24, 2002.

"Presidents' Forum on Intellectual Property: A Leadership Discussion with The Licensing Executives Society, the American Intellectual Property Law Association, the Association of University Technology Managers, the Intellectual Property Owners Association, The National Inventors Hall of Fame, and BIO", Licensing Executives Society Annual Conference, Chicago, September 24, 2002.

"Extracting Value From Your Intellectual Asset Portfolio: Ensuring ROI from IP and Technology Assets", World Research Group, November 22, 2002, Chicago, Illinois.

"Licensing", American Intellectual Property Law Association 2003 Mid-Winter Institute, Marco Island, Florida, January 22 – 25, 2003.

"Cashing in on Chicago: A Closer Look at Liquidity in the Heartland", The Executives' Club of Chicago, Panel Discussion, February 11, 2003.



Conference Chair and Speaker, "Optimizing Valuation & Value Realization of your IP/Intellectual Assets", World Research Group, Las Vegas, February 27-28, 2003.

Live Webcast, "Turning Your Intellectual Property into Cash", Ernst & Young Business Insights, April 28, 2003.

Intermediate PDS Workshop: Application of Private Equity and Leveraged Finance Investing to Intellectual Property, LES / AUTM Summer Meeting, Philadelphia, May 8, 2003.

World Research Group, Advanced Intellectual Property Structured Finance, Conference Co-Chair Person, New York City, June 29-30, 2003.

The Conference Board, The 2003 Conference on Intellectual Asset Management & Value Reporting, "Application of Private Equity and Leveraged Finance Investing to Intellectual Property", Chicago, June 4, 2003.

Intellectual Property and Information Technology for Investment Funds, "Intellectual Capital Equity Management", Panel Discussion Sponsored by Schulte Roth & Zabel, New York City, June 18, 2003.

Chicago Capital Access Forum III, "Private Investors: The Case for Domestic Emerging Market Investments", Panel Discussion, Chicago, June 26, 2003.

Pension Consultants' Forum, "Extracting Value from Private Equity Investing", World Research Group, Chicago, July 22, 2003.

Midwest Intellectual Property Institute, "Intellectual Capital Equity Management", Minneapolis, September 19, 2003.

"Intellectual Asset Strategies", Add-On Seminar at the 2003 Licensing Executives Society Annual Meeting, San Diego, September 25, 2003.

"Leveraging Intellectual Property", Keynote Speaker, Thomson Financial Thought Leadership Forum, New York, October 8, 2003.

"Beyond Licensing: Innovative Techniques for Extracting Value", Advanced Forum on Licensing Intellectual Property, San Francisco, December 9, 2003.

Intellectual Asset Management, Column: *IP Merchant Banker*, Douglas R. Elliott & James E. Malackowski, Issue 01, "Challenges of the Fifth Epoch", July / August 2003; Issue 02, "What the Market Foretells", September / October 2003; Issue 03, "Economics, Ethos and Intellectual Ethics", December / January 2004; Issue 04, "Patent Predictions – facts or fictions?", February / March 2004; "Wealth management in the age of patents", June / July 2004; "Patent pools – the 80% solution", August / September 2004.

"Intellectual Capital Equity Management: IP as an Asset Class", Minnesota State Bar Association Continuing Legal Education, Minneapolis, January 15-16, 2004.



“Understanding the Motivations Behind an IP Structured Finance Transaction”,
“Analyzing the Anatomy of A Patent-Based Structured Finance Transaction”,
World Research Group, New York, January 21-22, 2004.

“Managing Your Intellectual Property”, Investment Banking for Women /
Minority Owned Business Enterprises, Annual Forum, Conference Co-
Chairperson, Chicago, March 3-5, 2004.

“Private Equity: Investor Capital for Mature Businesses”, DreamMakers Forum
2004, Santa Barbara, California, March 7 – 10, 2004.

“IP Finance: Convergence of IP Valuation and Value Creation”, World
Research Group 2nd Annual Strategies and Solutions for Optimizing IP
Valuation & Value Creation, Chicago, March 23 – 24, 2004.

“Leveraging the Value of Intellectual Property”, Creating, Managing & Valuing
an Intellectual Property Portfolio, Vedder Price Conference Series, Chicago,
April 28, 2004.

“Federal Circuit Damages Decision Emphasizes the Importance of Sound
Economic Models”, IP Review, McDermott Will & Emery, with Robert M.
Hess, Spring 2004.

“Intellectual Property Merchant Banking: Leveraging Corporate Intangible
Assets”, The Licensing Executives Society (U.S.A. & Canada), Inc., Fairfield-
Westchester Counties Chapter, June 23, 2004.

“Intellectual Property Financing and Securitization: Conclusions and Future
Implications for Financing the IP Market”, New York, New York, July 21,
2004.

“Emerging Financial Concepts in IP Asset Management”, Mining Patent
Portfolios, Seattle, Washington, September 13, 2004.

“Intellectual Property Investment”, National Institutes of Health,
Commercialization Assistance Program, Larta Institute, Chicago, November 12,
2004.

“Using Intellectual Property to Grow”, The Beacon, Chicagoland
Entrepreneurial Center, Volume 3, Issue 4, December 10, 2004.

“Techniques for Assessing the Value of Your IP Portfolio”, The Wall Street
Transcript Intellectual Property Conference, New York, January 27, 2005.

“The Tipping Point: Assessing Major Challenges and Growth Opportunities in
IP Finance”, Moderator, The 3rd Annual Advancing IP Structured Finance
World Research Group Conference”, New York, February 3, 2005.

“Commerce One IP Auction”, Optimizing IP Valuation and Value Creation,
World Research Group Conference, Miami, March 30-31, 2005.



"Intellectual Capital Equity Management: IP As An Asset Class", Minnesota Continuing Legal Education Conference, Minneapolis, May 12, 2005.

"Techniques for Evaluating IP Potential", Life for After Rembrandts, Law Seminars International, Chicago, Illinois, August 4, 2005.

Keynote Address, 2nd Annual Intellectual Property Financing and Securitization Summit, New York, September 26, 2005.

"The Power of Intellectual Property in Private Equity Deals", Association for Corporate Growth and The Licensing Executives Society Connecticut Chapters, Greenwich, Connecticut, October 6, 2005.

"Maximizing the Value of Distressed Debt Backed by Intellectual Property", Financial Research Associates Distressed Debt Summit 2005, New York, October 7, 2005.

"To Sell or Not to Sell", Licensing in the Boardroom 2005, a supplement to *Intellectual Asset Management* magazine, 2005.

Patent Auctions & Marketplaces: Leveraging Value from Under-employed Technologies, IP Master Class Presentation, Washington DC, January 10, 2006.

"Risky Business: Overlooking Patents as Financial Assets", Making Innovation Pay, Edited by Bruce Berman, Published by John Wiley & Sons, Inc., 2006.

"The State of Development & Current Trends in IP Structured Finance" and "The Tipping Point: Assessing Major Challenges, Growth Opportunities and Future Trends in IP Finance", Moderator, The 4th Annual Summit on IP Structured Finance, New York, March 22-23, 2006.

"Generating Revenue From Your Inventions", JIR 2nd Annual Summit on IP Rights for Financial Services, New York, April 25-26, 2006.

"A Behind the Scenes Look at the Patent Bazaar: How Companies and Industry Are Buying and Selling Patents", Innovators in IP Litigation, IP Law & Business, San Jose, California, May 17, 2006.

"Patent Markets and Their Impact to R&D Strategy", Industrial Research Institute Annual Meeting, May 21-24, 2006, Colorado.

USC Gould School of Law 2006 Intellectual Property Institute; Featured Speaker, "A Final Word"; Panelist, "Patent Trolls: The Good, the Bad and the Ugly"; May 23, 2006, Los Angeles.

"Patent Auctions: Past, Present & Future", The 50th Annual Conference on Developments in Intellectual Property Law, John Marshall Law School Center for Intellectual Property Law, May 25-26, 2006, Chicago. Speech published as "The Intellectual Property Marketplace: Past, Present and Future", 5 J. Marshall Rev. of Intell. Prop. L. 605, (2006)



"Patent Auctions: Risky Endeavor or Legitimate Market Opportunity?",
Strafford Legal Teleconference Presentations, June 8, 2006.

The Intellectual Property Investment Summit: Connecting Investors with
Strategic Intellectual Property Opportunities, Presented by the Center for
Applied Innovation, Summit Co-Chairperson, June 15, 2006, Chicago.

Innovative Structures for Acquiring Intellectual Property: The Benefits,
Challenges and Process, LSI Law Seminars International, Program Co-Chair,
July 17, 2006, Chicago.

"Licensing and Intellectual Property", Chicago Regional Independent Inventor's
Conference, Presented by the United States Patent and Trademark Office,
Northwestern University School of Law, and the National Inventors Hall of
Fame Foundation, July 28-29, 2006, Chicago.

"Reinventing the IP Marketplace – The Exclusive Ocean Tomo Patent Auction
Case Study", IP Licensing Summit: Practical Strategies to Maximize Revenue in
Today's Challenging Intellectual Property Marketplace, August 21-23, 2006,
New York.

"Unlocking the Value of Intellectual Property Rights", Conference of the
International Bar Association, September 20, 2006, Chicago.

"This Too Shall Pass", Americas IP Focus 2006, Managing Intellectual Property
Rights, Copyright, Euromoney Institutional Investor, PLC, 2006.

"Developing Markets for Intellectual Assets and Technology", 21st Annual
Intellectual Assets and Technology Law Institute, October 5 & 6, 2006, Irving,
Texas.

"Patent Damages" and "Patent Reform Efforts: An Update and Review", The
Sedona Conference Patent Litigation VII, October 12-13, 2006, Sedona,
Arizona.

"Patent Auctions", 44th Annual Intellectual Property Law Conference, The
Center for American and International Law, November 9-10, 2006, Plano,
Texas.

"The Future of Developing IP Markets", 3rd Annual Monetization of Intellectual
Property & Intangible Assets, Strategic Research Institute, November 16-17,
2006, Boston.

"The IP Transactional Landscape", Economics of IP Based Transactions,
National Knowledge & Intellectual Property Management Taskforce Series
Program, November 29-30, 2006, Washington, D.C.

Keynote Presentation, The Business of Intellectual Property Conference, Tech
Council of Maryland, Rockville, Maryland, January 10, 2007.

Luncheon Speaker, Corporate Intellectual Property Roundtable, Georgia State
University College of Law, Atlanta, January 24, 2007.



"Patent Markets", American Intellectual Property Law Association, 2007 Mid-Winter Institute, New Orleans, January 24-27, 2007.

"Assessing the Real Value of Your IP Portfolio" and "Growing IP Impact on Public and Semi-Public Markets", The 5th Annual Summit on Monetizing, Financing & Securitizing IP, New York, January 30-31, 2007.

"Ocean's 300", Moderator, World Intellectual Property Review 2007, pp. 16-20.

"The Intellectual Property Marketplace: Emerging Transaction and Investment Vehicles", Co-author with Cardoza, Gray and Conroy, *The Licensing Journal*, Aspen Publishers, Vol. 27, No. 2, pages 1 - 11, February 2007.

"The Importance of Emerging Intellectual Property Market Opportunities to the City of Chicago", Keynote Speaker, Notre Dame Club of Chicago Meeting, Chicago, March 8, 2007.

"The Intellectual Property Marketplace", Harvard Business School Club of New York, New York, April 12, 2007.

Keynote Address, BRICs & Mortar: Technological Drivers in Booming Economies of Brazil, Russia, India and China, Northwestern University Journal of Technology & Intellectual Property Second Annual Symposium, Chicago, April 13, 2007.

"Innovation Measurement: The Economic Impact of Patent Value", Co-author with Barney, Cardoza, Walker and Gray, Submission to United States Department of Commerce Economics and Statistics Administration, Pursuant to Notice in the Federal Register, Vol. 72, No. 71, 18627, May 11, 2007.

"Objective Patent Valuation", Business Meeting, Association of Corporate Patent Counsel, Newport, Rhode Island, June 27, 2007.

"Intellectual Property Exchange Chicago", a two day symposium presented by The National Knowledge & Intellectual Property Management Taskforce and The Center for Applied Innovation, Moderator and Speaker, July 17 - 18, 2007, Chicago.

"Start-up Stories: Tales from the Front Line", TiE Midwest, August 1, 2007, Chicago.

Keynote Address, Notre Dame Financial Executives Alumni Conference, September 21, 2007, South Bend, Indiana.

"The Birth of an IP Marketplace", Missouri Bar Association Seminar, November 2, 2007, St. Louis, Missouri.

"Market Forces and IP", The Giles S. Rich American Inn of Court, Howard University, January 17, 2008.



"Market for Technology: Challenges and Opportunities", Panel Discussion on Impediments to Technology Markets, Duke University's Fuqua School of Business, February 20, 2008.

"IP Markets – An Intangible Walk Down Wall Street", Keynote Address, Securities Industry and Financial Markets Association, March 11, 2008, New York.

"Patent Valuation, Is there One or Many?", Mini-Plenary Session of the High Tech Sector, The Licensing Executives Society International Annual Meeting, May 7, 2008, Chicago.

"What is Patent Quality – A Merchant Banc's Perspective", with Jonathan A. Barney, *les Nouvelles*, June 2008, p. 123 – 134.

"Intangibles in the Firm and Financial Markets", *Intangible Assets: Measuring and Enhancing Their Contribution to Corporate Value and Economic Growth*, The National Academies, Washington DC, June 23, 2008.

"Developing IP Markets: Opportunity for the Financial Services Industry", Keynote Address, The 5th Annual Patents & The Financial Services Industry Symposium, New York, July 29, 2008.

"New Trends in Monetizing IP Rights: Trolls, Licensing and Securitization", *Managing Intellectual Property* Webinar, September 3, 2008.

"Magnificent Mile – Shopping for the Ideal IP Expert", DRI Intellectual Property Litigation Seminar, September 4-5, 2008, Chicago.

From Assets to Profits: Competing for IP Value and Return, Contributing Author, Edited by Bruce Berman, John Wiley & Sons, November 2008.

Ocean Tomo: The New Kid on the (Auction) Block is All Grown Up, Institute for Law and Technology, 46th Annual Conference on Intellectual Property Law, November 10 – 11, 2008, Plano, Texas.

Federal Trade Commission: The Evolving Intellectual Property Marketplace, Keynote Address, Public Hearings, April 17, 2009, Washington, DC.

"Protecting and Commercializing New Ideas", CoreNet Global Chicago Chapter Meeting, Chicago, May 13, 2009.

"The Future of the IP Marketplace", Moderator and Plenary Speaker, IP Markets 2009, Chicago, July 23, 2009.

"Staying Ahead of the Curve – Strategic Intelligence, Value Assessments and Monetization in a Highly Competitive Economy", The 6th Annual Patents & The Financial Services Industry Conference, New York City, July 28-29, 2009.

"Helping Companies in a Down Economy: Strategic Planning for Identifying and Valuing Your IP", American Bar Association Annual Meeting, Chicago, July 31, 2009.



"Managing IP During Uncertain Times", NanoBusiness Alliance Conference, Chicago, September 8, 2010.

National Economic Framework for Intellectual Property Based Commerce, A Research Report by the National Knowledge & Intellectual Property Management Taskforce, Net Worth Press, 2009.

"The Role of IP in Tough Economic Times and How to Use it to Your Advantage: Corporate Recovery and Restructuring", Licensing Executives Society Annual Meeting, San Francisco, October 19, 2009.

"Global IP Market Development", 11th Annual Utah IP Summit, Salt Lake City, February 13, 2010.

"Law, Economics, Business and Policy Implications for Innovation and Competition of Diverse Business Models for Using Patents", Stanford University Hoover Institution Annual Conference, Stanford, California, June 25, 2010.

"Establishing an Objective Value of IP", IPO Annual Meeting, Atlanta, September 14, 2010.

"Intellectual Property and the Marketplace: Hot Topics Impacting the Role of Patents, Trademarks and Copyrights in Today's Business World", Vedder Price Illinois Continuing Legal Education Forum, Chicago, October 6, 2010.

"IP Essentials for the Chief Executive Officer", Illinois Technology Association, Chairman's Dinner Keynote Speaker, Chicago, October 20, 2010.

"Valuation of IP in Emerging Market Platforms", 2010 IP Damages Institute, CalCPA Education Foundation, Los Angeles, November 8, 2010.

"Shifting Sands: What is Discoverable and Admissible for Damages, Willfulness and Other Purposes", Intellectual Property Owners Association CLE Roundtable, Washington, DC, March 21, 2011.

"Intellectual Property: From Asset to Asset Class", Intellectual Property Strategies for the 21st Century Corporation, Bryer, Lebson & Asbell Editors, John Wiley & Sons, Inc., 2011.

"The Next Big Think in Monetizing IP: A Natural Progression to Exchange-Traded Units", Ian D. McClure co-author, *LANDSLIDE*, A Publication of the ABA Section of Intellectual Property Law, Volume 3, Number 5, May/June 2011, pp. 32-37.

"Risk Management Strategies to Defend Against Patent Trolls and the New Trend in Patent Royalty Trusts", 2011 Congress on Patent Strategies for the Financial Services Industry, New York, September 19-20, 2011.

"Patent Quality and its Impact on Valuation", Licensing Executives Society United States and Canada, Inc., Annual Meeting, San Diego, October 17, 2011.



Introduction, “LESI Global Technology Impact Forum (GTIF) Creates Tech Transfer Platform”, *les Nouvelles*, Journal of the Licensing Executives Society International, Volume XLVII No. 2, June 2012.

Panelist, “IP Monetization”, McDermott Will & Emery 2012 Intellectual Property Symposium, Chicago, June 14, 2012.

Keynote Address, Northwestern Law Fifth Annual Conference on Entrepreneurship and Innovation, Chicago, June 14, 2012.

“IP Market Development”, 38th Annual Intellectual Property Law Summer Institute, Sponsored by the Intellectual Property Law Section of the State Bar of Michigan, Traverse City, Michigan, July 21, 2012.

“An Investors’ Perspective on IP”, CenterForce IP Strategy Summit, New York City, New York, November 13, 2012.

“Investing in IP”, DealFlow Media Webinar, January 10, 2013.

“Evolving IP Marketplace”, American Intellectual Property Law Association, Mid-Winter Meeting, Tampa, Florida, February 1, 2013. Includes paper: *New Emphasis on the Analytical Approach of Apportionment In Determination of a Reasonable Royalty* by James E. Malackowski, Justin Lewis and Robert Mazur.

“An Inventor’s Walk Down Wall Street”, PatCon 3 at Illinois Institute of Technology Chicago-Kent School of Law, Chicago, April 12, 2013.

Report on Judge Rader Comments at the 2013 LESI Annual Conference, LESI Global News, Vol. XLVIII No. 2, June 2013.

“Strategic Insights”, Plenary Panel Discussion, IPBC 2013, IP Business Congress, Boston, June 9, 2013.

“IP and Antitrust”, Panel Discussion, McDermott 2013 IP Symposium, June 13, 2013, Chicago.

IP Investments and Markets Presented by the Center for Applied Innovation, Panelist on IP Marketplace, Chicago, June 25-26, 2013.

Capturing Innovation, Irish Entrepreneurs: An Affiliate Group of the Notre Dame Club of Chicago, Chicago, September 5, 2013.

Preventing the Napsterization of 3D Printing: Areas for Industry Collaboration and Transparency, Inside 3D Printing Conference and Expo, San Jose, California, September 18, 2013.

The Latest Thinking about Non-Practicing Entities, 2013 AIPLA Annual Meeting, Washington, DC, October 25, 2013.